CLAIMS

1. through 25. (Cancelled)

26. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity is a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, ~~The method of claim 25~~ wherein the mold face includes a plurality of ridges and valleys, and wherein the vacuum chamber is a vacuum line network, the vacuum line network being positioned substantially coincidentally with the valleys.

27. (Currently Amended) The method of claim ~~25~~ 26 wherein the vacuum chamber and vacuum holes define the only voids in the mold.

28. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity is a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, ~~The method of claim 25~~ wherein the mold is of varying thickness and wherein the vacuum chamber is a vacuum line network, the vacuum line network extending through the mold in areas of lesser thickness.

29. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity is a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, ~~The method of claim 25~~ wherein the vacuum chamber is a vacuum line network, the vacuum line network being laid out in a grid pattern within the mold.

30. (Original) A process for manufacturing a vacuum mold comprising:

impressing into a mold media a mold cavity corresponding in shape to a desired shape of the mold;

suspending a vacuum chamber in the mold cavity, the vacuum chamber having an attachment means for operatively connecting the mold cavity to a vacuum supply means;

supplying a molten material to the mold cavity, the molten material filling at least a portion of the mold cavity and surrounding at least a portion of the vacuum chamber;

curing the molten material to define the mold at least partially surrounding the vacuum chamber, the mold defining a contoured face to shape a thermoformable sheet; and

defining a plurality of holes in the mold to create fluid communication between the vacuum chamber and the face.

31. (Original) The process of claim 30 wherein the vacuum chamber is a vacuum line network.

32. (Original) The process of claim 30 wherein the vacuum chamber is a vacuum cabinet.